

FIG. 1

F1G. 2B

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Blood

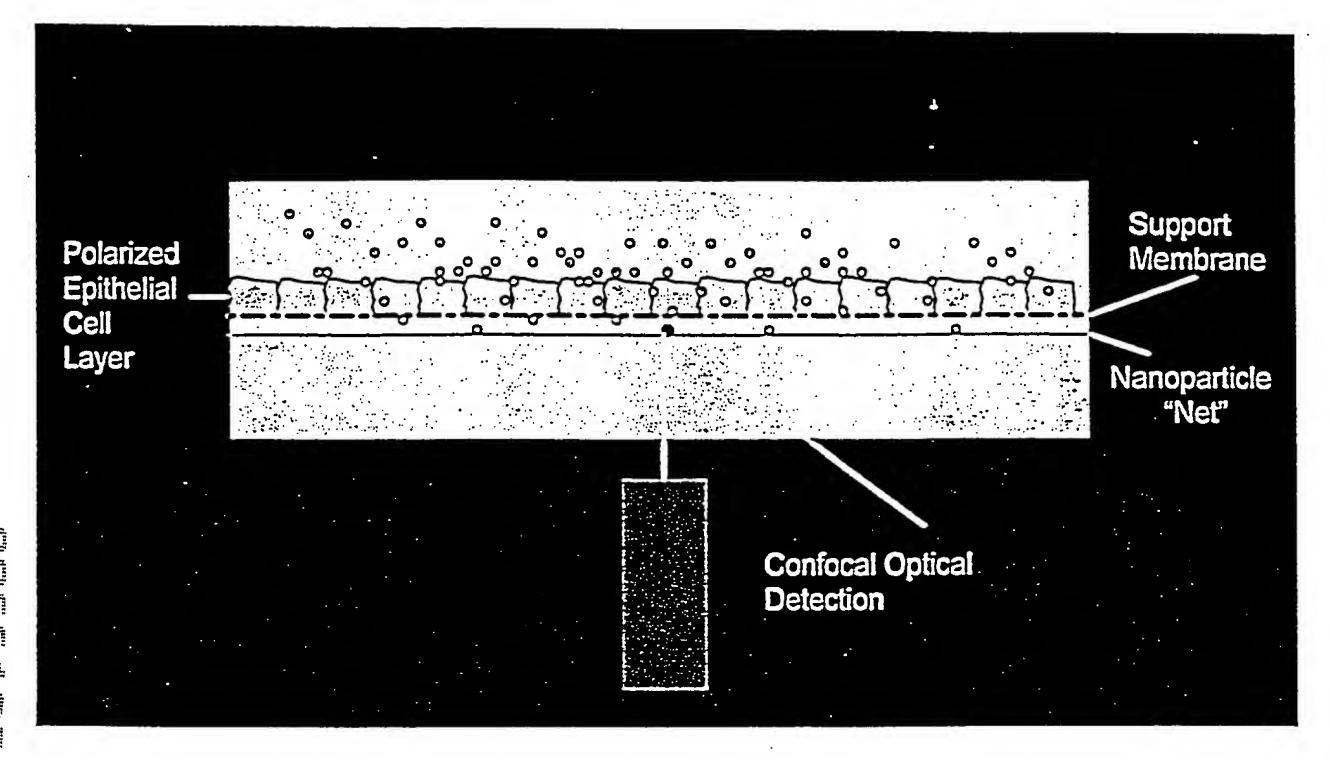
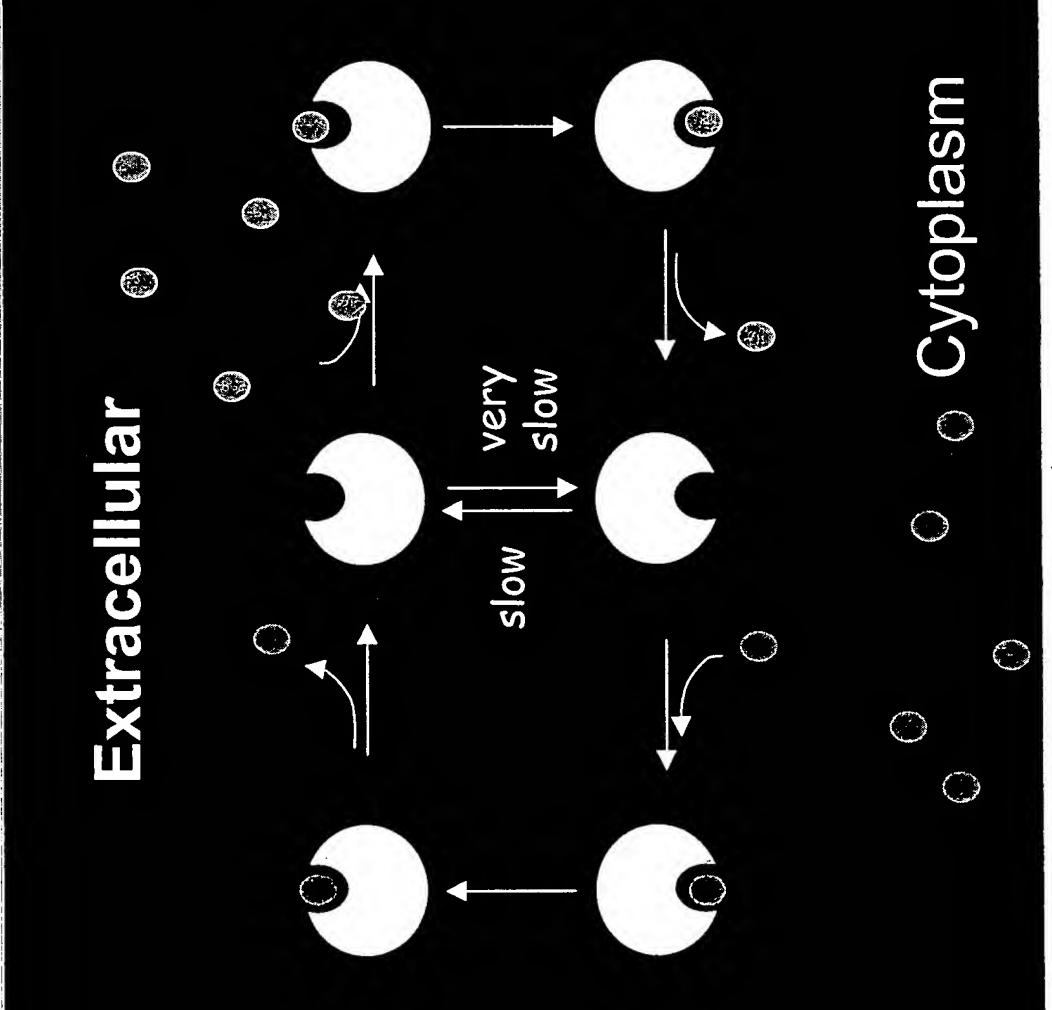


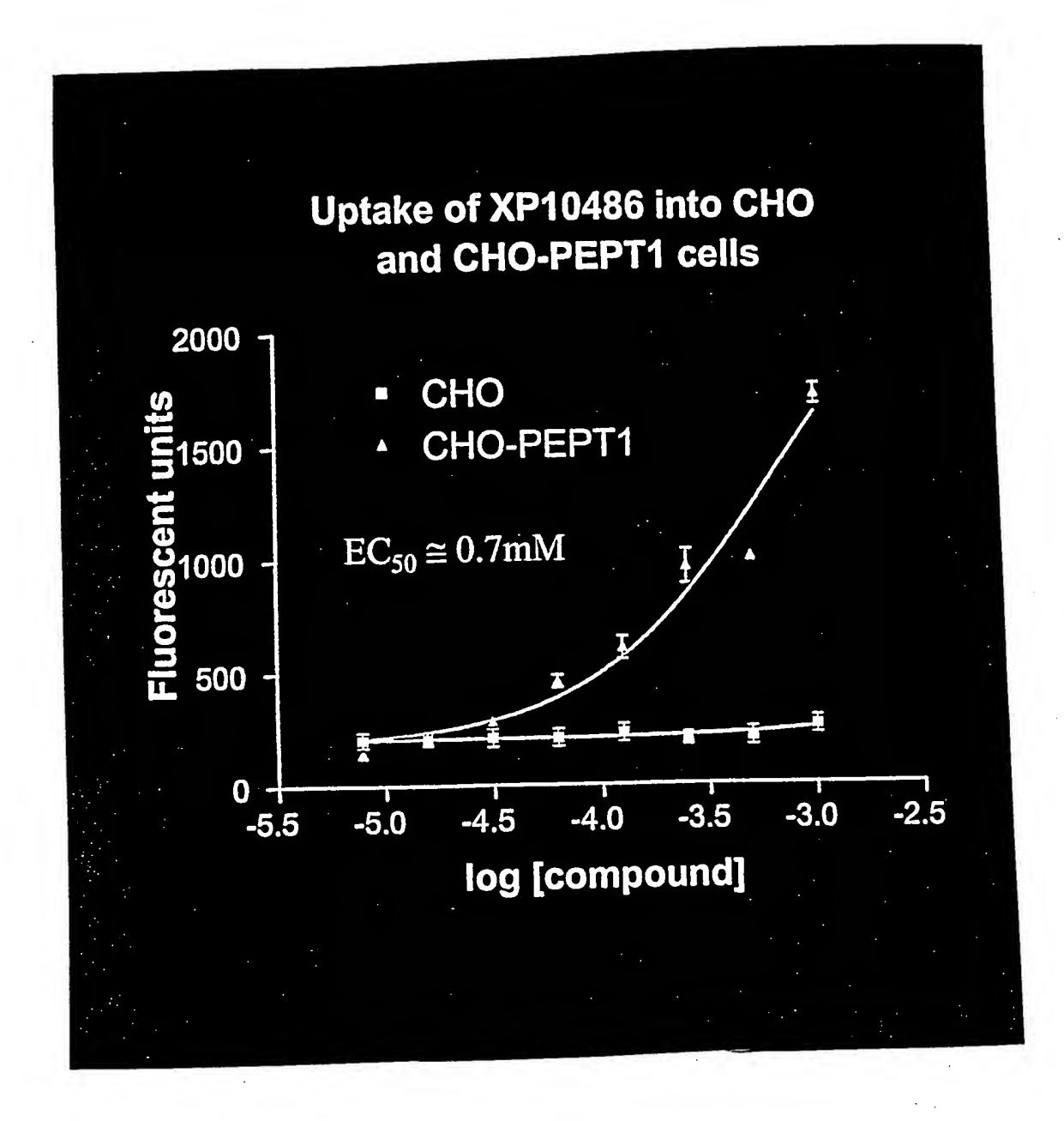
FIG. 3

Substrate-mediated Efflux "Trans-stimulation"

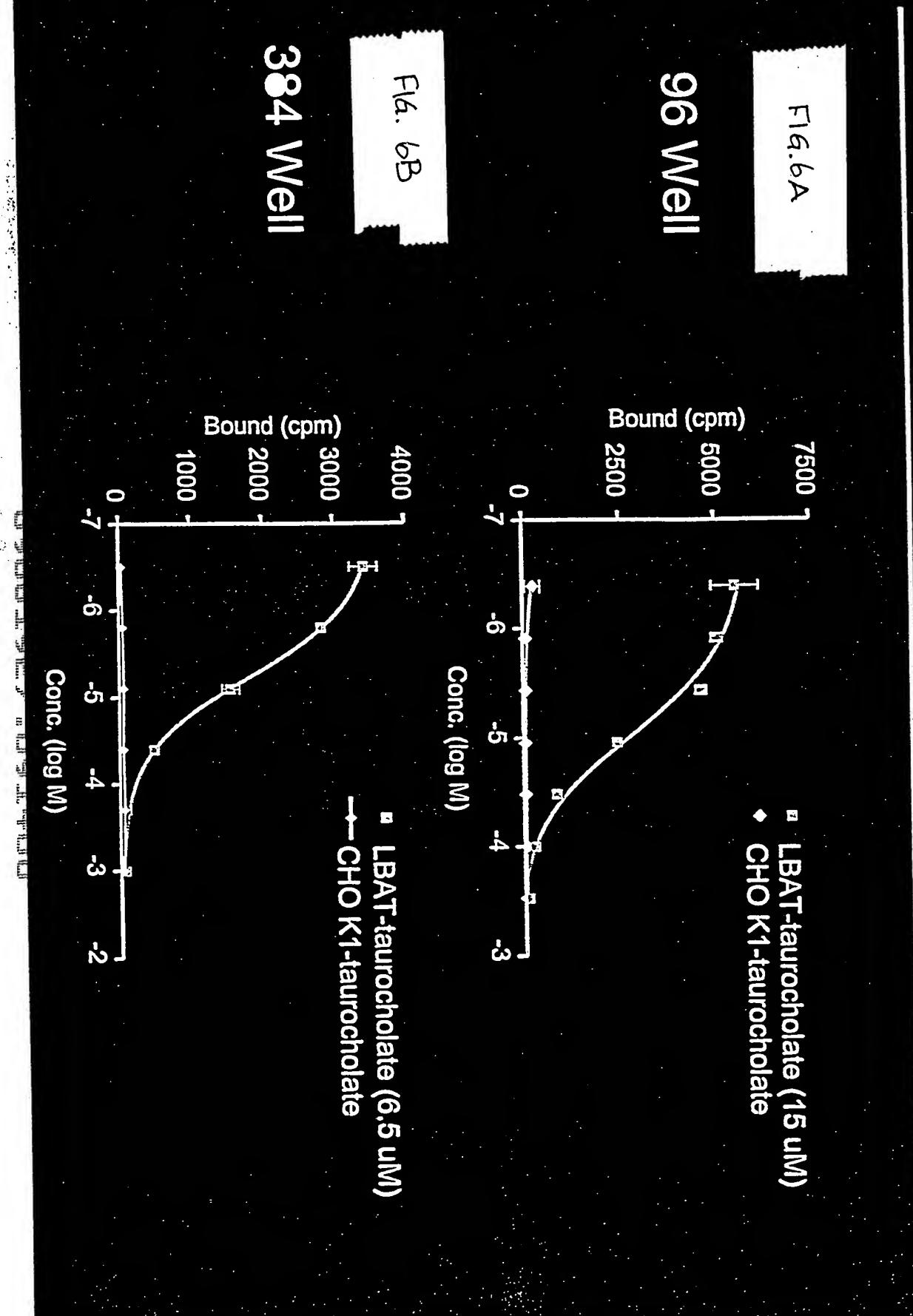
THE REAL PROPERTY OF THE PARTY OF THE PARTY



F1G. 4



F16.5



10 Pools from 200-Member Fluorescent Dipeptide Library

FIG. 7

Synthesis of a Dipeptide Library

Fmoc-N
$$\stackrel{}{\longrightarrow}$$
 $\stackrel{}{\longrightarrow}$ $\stackrel{\longrightarrow$

Synthesis of β -Lactam Library

Synthesis of Fluorescent PEPT1 Substrate XP10486

NO₂

Using Combinatorial Potential of Dipeptide Motif to Rapidly Establish

Structure-Activity Relationships for PEPT1

F1G. 12

(i) Piperidine, DMF

(i) PhSNa, DMF

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DIC, DIEA, HOBt, CH₂Cl₂

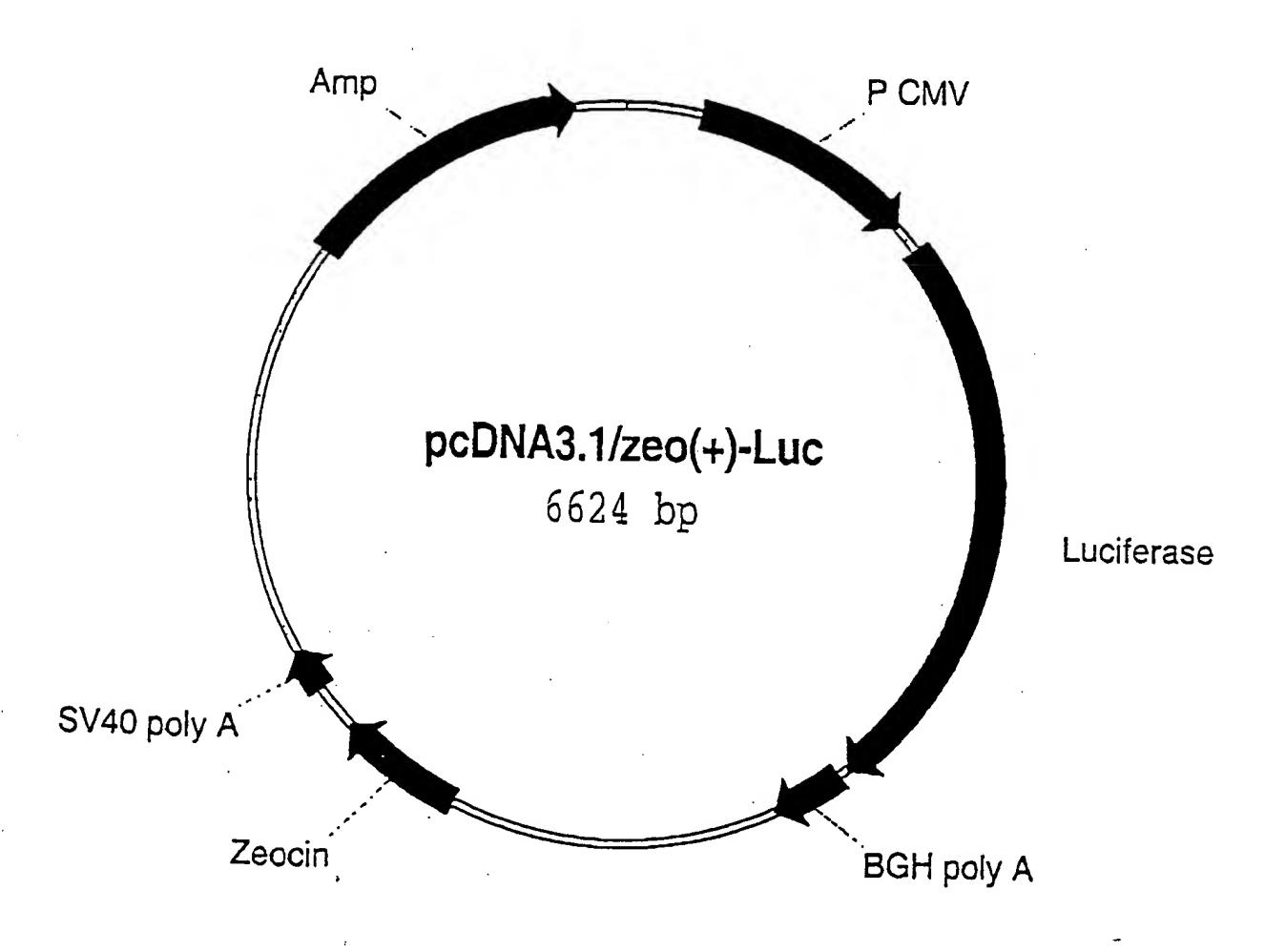
(v) TFA, CH₂Cl₂

DIC, DIEA, CH2Cl2

(i)
$$[Pd(PPh_3)]_4$$
, Me_3SiN_3 , THF

NHAlloc Q

F1G. 14



F16. 15

Synthesis of Luciferin-Glycocholate Ester Conjugate CZ15-73

 \equiv

Bile Acid - Luciferin Conjugate Librar y

HO₂C

$$N = 1$$
 $N = 1$
 $N = 1$

(i) R1 = OH; R2 = α -OH (ii) R1 = OH; R2 = H

(iii) R1 = H; R2 = α -OH

(iv) R1 = H; R2=β-OH (v) R1 = H; R2 = H

FIG. 18

itionally Fluorescent Dipeptide GP5-75-2 Synthesis of Cond

G5-75-2

NH₂

orescent

Fluorescent Dipeptide GP5-00 Synthesis of Conditionally

Preparation of Cholyl-L-Lys-(E-NBD)-OH

HO

F16. 22

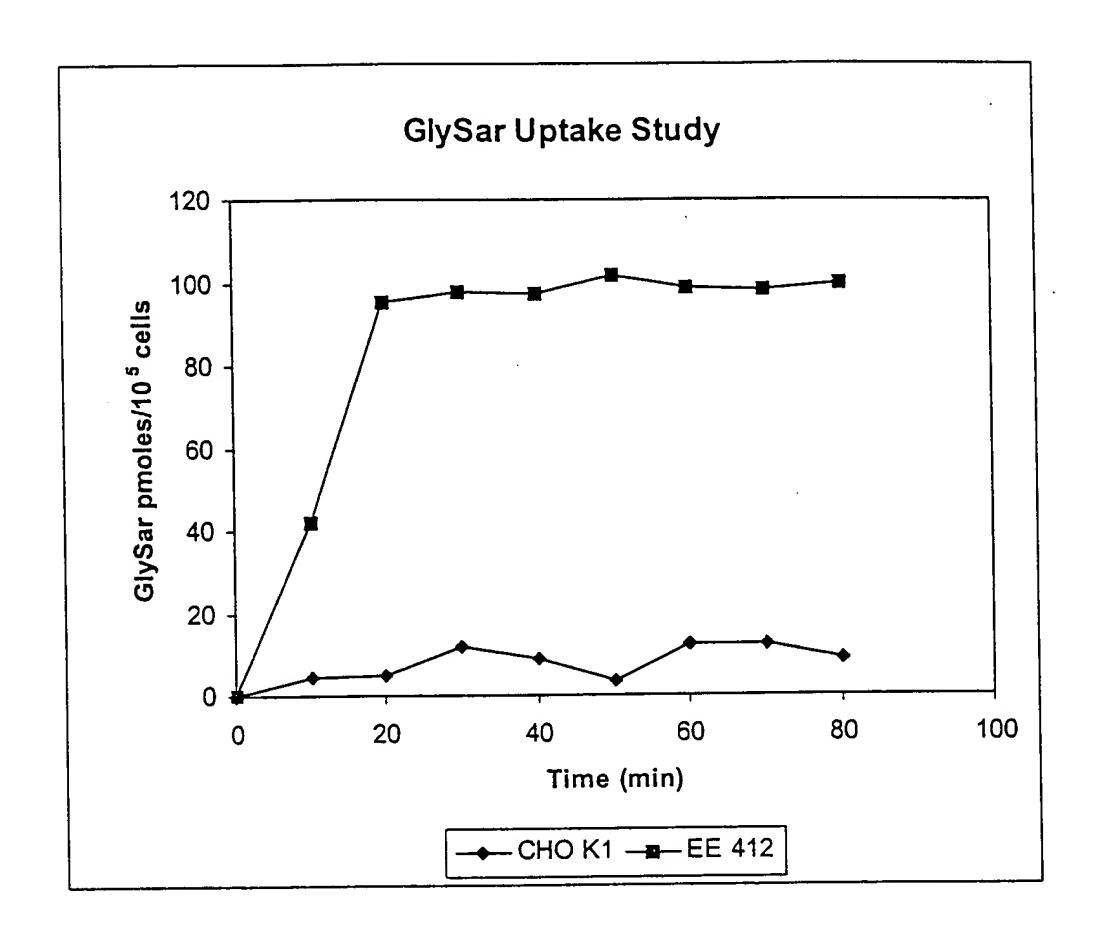
HO.

HOM

Preparation of Cholyl-Lysine Conjugate of Naproxen

F16. 23

Preparation of Cholyl L-Dopa

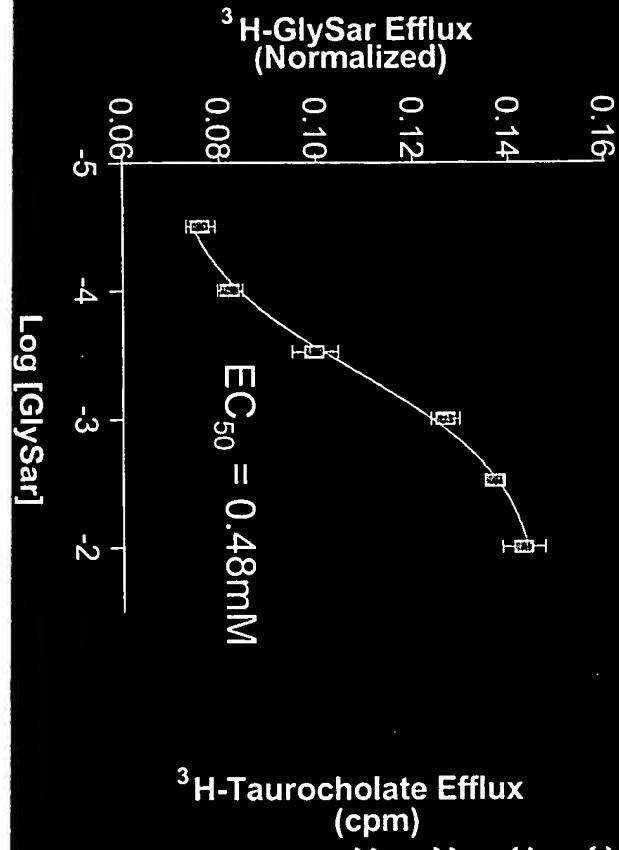


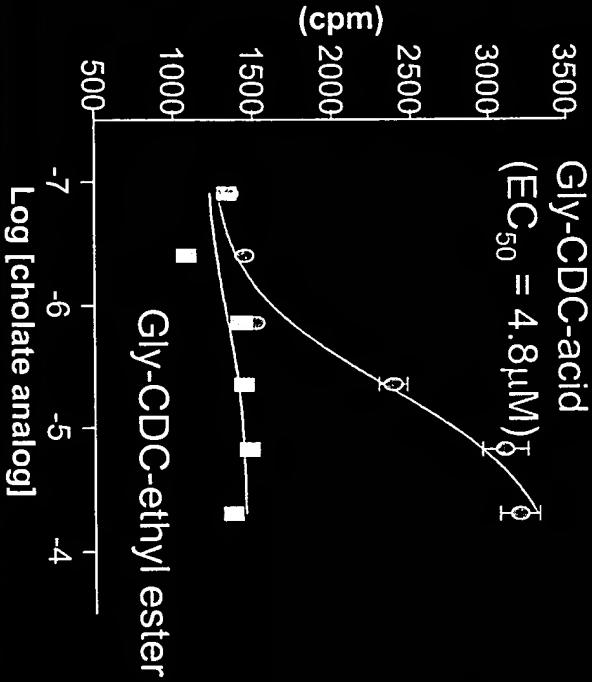
F1G. 25

Trans-stimulation Assays

³H-GlySar efflux by unlabeled GlySar in CHO-PEPT1 cells

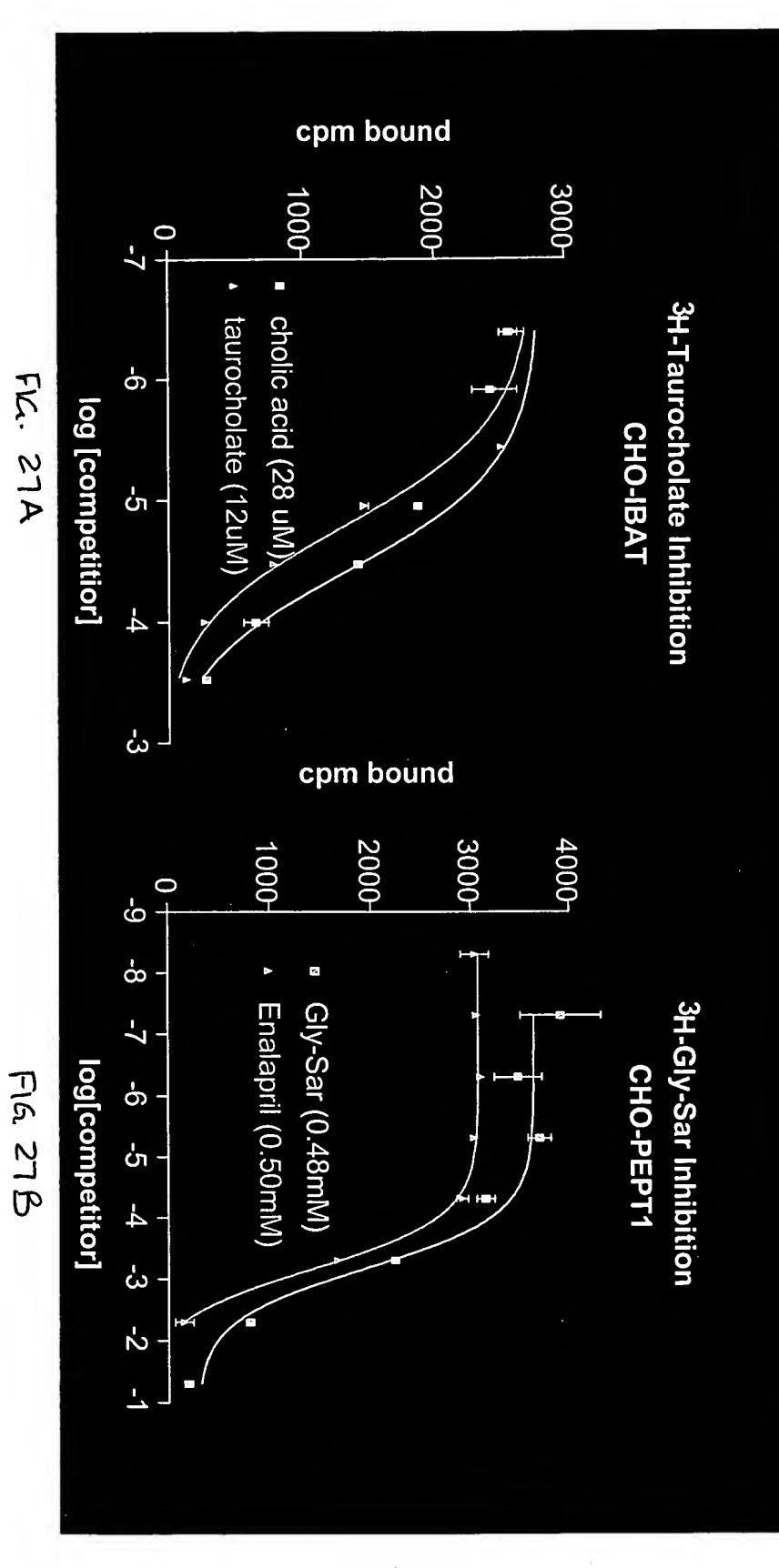
³H-Taurocholate efflux by Cholate analogs in CHO-LBAT cells





26 A

26 B



F16, 28

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НО,

.CO₂H ,CO₂H HO OH AcHN OH AcHN" NH HŇ HN NH₂ Relenza NH₂ OHC CHO H Fmoc-N Fmoc-N. PBu₃, H₂O R2 THF S-S-tert-Butyl X= CH, Ņ SH

F16. 29

e)

CO₂H